

Patent claims

1. A shirred tubular food casing based on thermoplastic in which the thermoplastic comprises a blend of at least one polyamide and/or copolyamide and at least one hydrophilic component, and the casing is biaxially stretch-oriented and is impregnated on the inside and/or outside with at least one component which allows the pleats of the casing to adhere to one another.
2. The shirred food casing as claimed in claim 1, wherein the (co)polyamide is an aliphatic (co)polyamide, preferably a linear aliphatic (co)polyamide.
3. The shirred food casing as claimed in claim 1 or 2, wherein the hydrophilic component is a natural and/or synthetic polymer which can take up at least 20 % by weight, preferably at least 40 % by weight, of its own weight of water.
4. The shirred food casing as claimed in claim 3, wherein the natural polymer is a polysaccharide.
5. The shirred food casing as claimed in one or more of claims 1 to 3, wherein the hydrophilic component is a water-soluble synthetic polymer.
6. The shirred food casing as claimed in claim 4, wherein the water-soluble synthetic polymer is a polyvinyl alcohol, a vinylpyrrolidone (co)polymer, a polyalkylene glycol, a (co)polymer containing units of N-vinylalkylamides, or a (co)polymer containing units of (meth)acrylic acid or (meth)acrylamide.
7. The shirred food casing as claimed in one or more of claims 1 to 3,

wherein the hydrophilic component is a polyether amide, polyester amide, polyether ester amide or polyamido urethane.

- 5 8. The shirred food casing as claimed in one or more of claims 1 to 7, wherein the component used for the impregnation is a water-soluble cellulose ether, preferably methylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxyethylcellulose, methylhydroxyethylcellulose, carboxymethylcellulose Na salt, carboxymethylhydroxyethylcellulose Na salt, and/or a polyalkylene glycol, preferably a polyethylene glycol having a molecular weight  $M_n$  in the range 200 to 1500 or a polyalkylene glycol mono- or dialkyl ether.
- 10 9. The shirred food casing as claimed in one or more of claims 1 to 8, wherein it is coated on the inside and/or outside with about 2 to 500  $\text{mg/m}^2$ , preferably about 20 to 250  $\text{mg/m}^2$ , particularly preferably about 50 to 150  $\text{mg/m}^2$ , of a component having adhesion properties, the component preferably comprising at least one polymer having adhesion properties.
- 15 10. The shirred food casing as claimed in one or more of claims 1 to 9, wherein the casing is stretched in an area stretching ratio of 6 to 18, preferably 8 to 11.
- 20 11. The shirred food casing as claimed in one or more of claims 1 to 10, wherein the casing is heat set.
- 25 12. The shirred food casing as claimed in one or more of claims 1 to 11, wherein the casing is single layered.
- 30 13. The shirred food casing as claimed in one or more of claims 1 to 12, wherein the wall thickness of the casing is 12 to 60  $\mu\text{m}$ , preferably 20 to 45  $\mu\text{m}$ .

14. The shirred food casing as claimed in one or more of claims 1 to 13, wherein the casing can take up 10 to 50 % by weight of water, based on its dry weight.
- 5 15. The shirred food casing as claimed in one or more of claims 1 to 14, wherein the shirring ratio is 80 : 1 to 500 : 1, preferably 100 : 1 to 400 : 1.
- 10 16. The use of the shirred food casing as claimed in one or more of claims 1 to 15 as artificial sausage casing in the production of cooked-meat sausages and scalded-emulsion sausages, and also of small sausages on fully automatic sausage stuffing and clipping apparatuses.